AMSAT News Service Weekly Bulletins
Issue: ANS-226
Date: 2022-08-14
Sources: amsat-ans-2022-ans-226-weekly-hyperkitty-5a7ce7064f.txt

---

AMSAT NEWS SERVICE
ANS-226

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to: ans-editor [at] amsat.org

You can sign up for free e-mail delivery of the AMSAT News Service Bulletins via the ANS List; to join this list see: https://mailman.amsat.org/postorius/lists/ans.amsat.org/

In this edition:

* 40th AMSAT Space Symposium and Annual General Meeting, Oct. 21-22
* India's New Rocket Fails To Put Satellites In Right Orbit In Debut Launch
* Russia Successfully Launches KAI 1 Repeater Along With Iranian Satellite
* Wireless Institute of Australia Supporting Binar Satellites
* Simultaneous Operations of APRS and Voice Repeater Now a Reality on ISS
* Changes to AMSAT-NA TLE Distribution for August 11
* Press Coverage of Eight-Year-Old’s ISS Ham Radio Contact
* ARISS News
* Upcoming Satellite Operations
* Hamfests, Conventions, Maker Faires, and Other Events
* Satellite Shorts From All Over

ANS-226 AMSAT News Service Weekly Bulletins

To: All RADIO AMATEURS
From: Radio Amateur Satellite Corporation
712 H Street NE, Suite 1653
Washington, DC 20002

DATE 2022 Aug 14

## 40th AMSAT Space Symposium and Annual General Meeting, Oct. 21-22

The 40th AMSAT Space Symposium and Annual General Meeting will take place in Bloomington, Minn. on Oct. 21-22, 2022. Highlights of all scheduled events include:

– AMSAT Board of Directors Meeting, October 20-21
– 40th AMSAT Space Symposium and Annual General Meeting, October 21-22
– Friday Night Social and Auction, October 21
– AMSAT Banquet and Reception, October 22
– AMSAT Ambassador Breakfast, October 23

A preliminary schedule is available on the AMSAT Member Portal, launch.amsat.org, under the Events tab.

Crowne Plaza is located adjacent to the Minneapolis / St. Paul International Airport and provides complimentary, scheduled shuttle to and from the airport. Nearby attractions include Mall of America with Nickelodeon Universe Theme park, Target Field, and the Minnesota Zoo.

You can make hotel reservations by calling the hotel directly at (952) 854-9000. The group code is ASG (Amateur Satellite Group). Hotel reservations can also be made online at the following link: https://tinyurl.com/ANS-219-Symposium-Rooms.

Symposium tickets and banquet reservations may be purchased on the AMSAT Member Portal. Log into https://launch.amsat.org/ and clock on the Events tab.

We at AMSAT, are excited to be able to host an in-person Symposium this year. We hope that you can join us in celebrating Amateur Radio in Space.

[ANS thanks AMSAT for the above information.]

+=+=+=

---

Russia Successfully Launches KAI 1 Repeater Along With Iranian Satellite

A Russian rocket on Tuesday successfully launched an Iranian satellite into orbit, along with a Russian amateur cubesat.

The Soyuz rocket lifted off as scheduled at 05:52 GMT Tuesday, Aug. 9 from the Russia-leased Baikonur launch facility in Kazakhstan. About nine minutes after the launch, it placed the Iranian satellite called Khayyam into orbit. It’s named after Omar Khayyam, a Persian scientist who lived in the 11th and 12th centuries.

Also aboard were 16 Russian cubesats, including the 3U cubesat KAI 1, aka KNITU-KAI, NILAKT DOSAAF LLC, ANO DPO "KIRO." Its callsign will be RS26S. It carries a 145/435 MHz repeater, panoramic cameras and a temperature meter based on a fiber Bragg grating. Currently no further details are available.

Among the other cubesats scheduled for this launch were ten Russian satellites in the SXC3 series, transmitting telemetry on amateur frequencies. A list of these satellites and their frequencies may be found at https://sputnix.ru/en/satellites-sputnix/for-radioamateurs

[ANS thanks N2YO.com, Nico Janssen, PA0DLO, and Nader Omer, HZ1NH, for the above information]

+=+=+=

The satellites in Launch 2 will be Binar-2, 3, 4 will have a multiband radio, capable of operating in the amateur band. The radio frequencies are allocated in the 70cm Amateur Satellite Radio band and, as required by local and international regulatory bodies (ACMA, ITU, IARU), will be coordinated through the IARU (International Amateur Radio Union) with the support of the Wireless Institute of Australia as the national association for Amateur Radio in Australia .

The main purpose of the usage of the amateur-satellite band allocation onboard the Satellites in Launches 2 and 3 is to provide a platform to educate high school and university students on satellite technology.

[ANS thanks Southgate ARC for the above information]

---

Simultaneous Operations of APRS and Voice Repeater Now a Reality on ISS

ARISS is pleased to announce that starting yesterday, August 11, simultaneous operations of the ARISS Voice Repeater and digital APRS communications on the International Space Station (ISS) is now a reality.  Current ARISS operations include voice repeater transmissions with the JVC Kenwood D710GA in the Columbus module and APRS packet operation from an identical radio in the Service Module (Zvezda). Packet operations are on 145.825 MHz.

The ARISS Russia and USA teams have been working for several weeks to prepare the Service Module radio for APRS operations.  ARISS Russia team member Sergey Samburov, RV3DR, led the effort, working with Russian mission controllers and the on-board ISS cosmonauts to configure the Service Module radio for APRS ops.  On August 11, final checkouts were completed and the APRS packet mode was switched on for amateur radio use.

ARISS-International Chair Frank Bauer, KA3HDO states, “Simultaneous operation of APRS and the voice repeater on ISS is transformative for ARISS and represents a key element of our ARISS 2.0 initiative, providing interactive capabilities 24/7 that inspire, engage and educate youth and lifelong learners—especially life-long learning in ham radio operations.”  Bauer continues, “Our heartfelt thanks to Sergey Samburov, RV3DR, for making this crucial ARISS 2.0 initiative become a reality.”

The Columbus Module radio uses the callsign NA1SS and the new Service Module radio uses RS0ISS.  Aside from the callsigns, the radios are identical and packet operations are the same as before.  You can use RS0ISS, ARISS, or APRSAT as the packet path.  Also, both radios are expected to be on full time, except during educational contacts, EVAs, and dockings or undockings.

You can find operational status and expected downtimes of the ISS radios at https://www.ariss.org/current-status-of-iss-stations.

[ANS thanks Dave Jordan, AA4KN, ARISS PR, for the above information]

+=+=+=

+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+=+

Changes to AMSAT-NA TLE Distribution for August 11

Two Line Elements or TLEs, often referred to as Keplerian elements or keps in the amateur community, are the inputs to the SGP4 standard mathematical model of spacecraft orbits used by most amateur tracking programs. Weekly updates are completely adequate for most amateur satellites. TLE bulletin files are updated Thursday evenings around 2300 UTC, or more frequently if new high interest satellites are launched. More information may be found at https://www.amsat.org/keplerian-elements-resources/

The following satellites have decayed from orbit and have been removed from this week's AMSAT-NA TLE distribution:

Maya-3  NORAD Cat ID 49273 (decayed form orbit on 8/3/2022 per Space-Track).
Maya-4  NORAD Cat ID 49274 (decayed form orbit on 8/8/2022 per Space-Track).

[ANS thanks Ray Hoad, WA5QGD, AMSAT Orbital Elements Manager, for the above information]

---

Press Coverage of Eight-Year-Old’s ISS Ham Radio Contact

Kent’s Isle of Thanet News reports on the amateur radio contact between 8-year-old Isabella Payne and NASA astronaut Kjell Lindgren KO5MOS on the International Space Station.

In the Isle of Thanet News, Kathy Bailes, writes:

A Broadstairs eight-year-old has chatted with an astronaut aboard the International Space Station and a recording of the conversation will feature on the NASA website.

Isabella Payne spoke to Astronaut Kjell Lindgren as the ISS flew overhead last week.

The youngster was with dad Matthew Payne, M0LMK, who is a license holding amateur radio enthusiast and tutor. He and Isabella are both members of Hilderstone Radio Society.

Matthew said: “Isabella has been a member of the radio club ever since she was born and has been playing with the radio since she was six. Because I have the full licence she can sit on my knee and use the radio to speak to people as long as I am controlling it. Everyone at the club can do that. She has been involved in a few radio events, Children On The Air events, and will hopefully go for her own licence soon.

Read full story by Kathy Bailes and listen to the recording on the Isle of Thanet News site at https://bit.ly/3vVAFNG or at https://twitter.com/IsleThanetNews/status/1557404614076530688

Matthew Payne, M0LMK, tweeted:
“Isabella has been having an email exchange with the @NASA #ISS team, you know, as you do! She sent a photo for their publicity team and asked for it to be sent onto @astro_kjell. Here’s what she got in return…”  https://twitter.com/m0lmk/status/1556976125359919105

ISS astronaut’s favourite ham radio contact
https://amsat-uk.org/2022/08/03/iss-astronauts-favorite-ham-radio-contact/

[ANS thanks AMSAT-UK for the above information]

---

ARISS NEWS

Amateurs and others around the world may listen in on contacts between amateurs operating in schools and allowing students to interact with astronauts and cosmonauts aboard the International Space Station. The downlink frequency on which to listen is 145.800 MHz worldwide.

Cambridge Public Library and Idea Exchange, Cambridge, ON, Canada, direct via VE3SWA. The ISS callsign is presently scheduled to be NA1SS. The scheduled crewmember is Kjell Lindgren, KO5MOS. Contact is go for: Thursday, 2022-08-18 at 17:45:15 UTC 66 degrees elevation.

Kjell Lindgren KO5MOS continues to be making general contacts on the cross-band repeater.  He is using NA1SS.  If any crewmember is so inclined, all they have to do is pick up the microphone, raise the volume up, and talk on the crossband repeater.  So give a listen, you just never know.

Both the crossband FM voice repeater and the APRS digipeater are now in simultaneous operation. See article above.

The latest information on the operation mode can be found at https://www.ariss.org/current-status-of-iss-stations.html

The latest list of frequencies in use can be found at https://www.ariss.org/contact-the-iss.html

[ANS thanks Charlie Sufana, AJ9N, one of the ARISS operation team mentors for the above information]

+=+=+=

EA4NF, Phillippe. August 1-3th and 13-16th, EL94 & EL95, FM and Liners, will confirm in LOTW as KE4NF. Hit him up on Twitter @EA4NF_Sat for details.

KI7QEK: Will I'm taking a family vacation in British Columbia and Alberta from August 27-September 3, and planning to bring FM and linear gear. "Holiday style" so no promises on passes, but I will be passing through these grids: DN09, DO00, DO01, DO11, DO20 & DO21

[ANS thanks Paul Overn, KE0PBR, AMSAT rover page manager, for the above information]

---

Hamfests, Conventions, Maker Faires, and Other Events

AMSAT Ambassadors provide presentations, demonstrate communicating through amateur satellites, and host information tables at club meetings, hamfests, conventions, maker faires, and other events.

2022 HamXposition, and ARRL New England and Hudson Division Convention (hamxposition.org)
Saturday and Sunday August 27 and 28, Marlborough, MA (Flea Market and some classes and workshops on Friday)
AMSAT will have a booth with info, demos, and items for sale.
Burns Fisher, WB1FJ will be presenting "What's New At AMSAT"

41st ARRL and TAPR Digital Communications Conference (DCC)
September 16–18, 2022
Hilton Charlotte Airport Hotel
Charlotte, North Carolina
https://tapr.org

2022 Rocky Mountain ARRL Division Convention
Friday, October 7th, 2022 to Sunday, October 9th, 2022
Event Center at Archer
3921 Archer Pkwy
Cheyenne, Wyoming 82007
https://wyhamcon.org/site

2022 AMSAT-UK International Space Colloquium
October 8–9, 2022
Kents Hill Park Conference Centre, Milton Keynes
https://rsgb.org/main/about-us/rsgb-convention/

40th Annual AMSAT Space Symposium and General Meeting
October 21–22, 2022
The Crowne Plaza Suites, 3 Appletree Square, Bloomington, MN
https://launch.amsat.org/event-4922878

[ANS thanks Paul Overn, KE0PBR, AMSAT Events page manager, for the above information]

---

Satellite Shorts From All Over

+ Filipino-made cube satellites Maya-3 and Maya-4 returned to Earth and ended their missions, the Space Technology and Applications Mastery, Innovation and Advancement (STAMINA4Space) Program announced on Tuesday. Maya-3 and Maya-4 reentered the Earth's atmosphere on Aug. 4 and Aug. 8, respectively. While in the orbit for 10 months, the two cube satellites carried a commercial off-the-shelf APRS-Digipeater

Payload Demonstration, which employed packet radio technology to transmit information over amateur radio. (ANS thanks CNN Philippines for the above information)

+ For the first time, Veraval Light House, situated at the south coast of Gujarat State from India, will be activated with the Special Amateur Radio Callsign AT3VLH. The Lighthouse is activated by active Ham Radio Operator Rajesh Vagadia, VU2EXP, from Rajkot (Gujarat) India. It is SOLO operator activation to experiment learn & spread awareness with amateur radio spirit. The activation will take place 19 to 22 August, 2022 utilizing 40m, 20m, 15m & 10m and FM Satellites. (ANS thanks Rajesh Vagadia, VU2EXP, for the above information)

+ A NASA cubesat was removed from a recent rideshare launch opportunity on a U.S. Space Force mission because the spacecraft could not meet guidelines for deorbiting at the end of its life. The GTOSat mission, developed by NASA’s Goddard Space Flight Center, was manifested to fly as a secondary payload on the Atlas 5 launch of the SBIRS GEO-6 missile-warning satellite. The SBIRS satellite was successfully launched Aug. 4. However, GTOSat and a second, unidentified rideshare payload were not included on the launch. Space Force officials said in a prelaunch briefing that the satellites were not compliant with orbital debris mitigation guidelines but did not elaborate. (ANS thanks SpaceNews for the above information)

+ Three 1 kg cubesats, TUMNanosat, FUTABA and HSU-SAT 1 were deployed from the J-SSOD No. 22 deployer on the ISS Japanese robot arm at 0945 UTC Aug 12. TUMNanosat has 9k6 GMSK AX25 downlink of beacons and telemetry on 436.680 MHz. FUTABA downlinks with 20 wpm CW beacon and 1k2 AFSK for FM telemetry and mission data on 437.375 MHz. More info from https://www.futaba.space/blank-3  HSU-SAT-1 has a downlink using CW, FM SSTV and 9k6 GMSK at 437.280 MHz. More information at https://bit.ly/3C3LFwa  (ANS thanks AMSAT-UK and the IARU for the above information)

---

Join AMSAT today at https://launch.amsat.org/

In addition to regular membership, AMSAT offers membership to:

* Societies (a recognized group, clubs or organization).
* Primary and secondary school students are eligible for membership at one-half the standard yearly rate.
* Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status.
* Memberships are available for annual and lifetime terms.

Contact info [at] amsat.org for additional membership information.

73 and remember to help Keep Amateur Radio in Space!

This week's ANS Editor, Mark Johns, K0JM
k0jm at amsat dot org